Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 27. (Cancelled)

28. (Currently Amended) A sensor, comprising:

a sensor body having a space for receiving an active protein in a solidified form; and

the active protein in said solidified form disposed within the space of the sensor body, the active protein in said solidified form comprising glucose oxidase, human serum albumin, and a cross-linking reagent, said active protein having been molded in a recess in a block of a mold and hardened into said solidified form prior to being disposed within the space of the sensor body, said active protein having been received within the space of the sensor body while in said solidified form~~.~~;

wherein said active protein in said solidified form is sufficiently immobilized prior to being disposed within the space of the sensor body such that the active protein in said solidified form minimizes swelling that would deform a shape of the sensor body and such that the active protein in said solidified form minimizes shrinkage that would create voids between the active protein in said solidified form and the sensor body once the active protein in said solidified form has been received within the space of the sensor body.

29. (Cancelled)

30. (Original) A sensor according to claim 28, wherein the cross-linking reagent is selected from a group consisting of glutaraldehyde, disuccinimidyl suberate (DSS), and 1-Ethyl-3 (3-Dimethylaminopropyl) Carbodiimide (EDC).

31. (Cancelled)

32. (Currently Amended) ~~A sensor according to claim 28,~~ A sensor, comprising:

a sensor body having a space for receiving an active protein in a solidified form; and

the active protein in said solidified form disposed within the space of the sensor body, the active protein in said solidified form comprising glucose oxidase, human serum albumin, and a cross-linking reagent, said active protein having been molded in a recess in a block of a mold and hardened into said solidified form prior to being disposed within the space of the sensor body, said active protein having been received within the space of the sensor body while in said solidified form;

wherein the active protein has been exposed to a vapor phase cross-linking process that employs said cross-linking reagent in a vapor phase.

33. (Previously Presented) A sensor according to claim 32, wherein the active protein has been incubated prior to having been exposed to the vapor phase cross-linking process.

34. (Previously Presented) A sensor according to claim 32, wherein the active protein has been immersed in a cross-linking solution after having been exposed to the vapor phase cross-linking process.

35. (Previously Presented) A sensor according to claim 28, wherein the active protein has been exposed to said cross-linking reagent in a vapor phase that comprises approximately 12.5% (w/w) glutaraldehyde for approximately 16 hours.

36. (Previously Presented) A sensor according to claim 32, wherein the active protein has been incubated by having maintained the protein mixture at approximately room temperature for at least approximately two hours prior to exposing the protein mixture to the vapor phase cross-linking process.

37. (Previously Presented) A sensor according to claim 32, wherein the active protein has been immersed in a cross-linking solution by having submerged the protein mixture in a buffered solution that is approximately 2.5% (w/w) glutaraldehyde for approximately one hour after having exposed the protein solution to the vapor phase cross-linking process.

38. (Previously Presented) A sensor according to claim 28, wherein the cross-linking reagent is glutaraldehyde.

39. (Previously Presented) A sensor according to claim 32, wherein the cross-linking reagent is glutaraldehyde.

40. (Previously Presented) A sensor according to claim 32, wherein the cross-linking reagent is selected from a group consisting of glutaraldehyde, disuccinimidyl suberate (DSS), and 1-Ethyl-3 (3-Dimethylaminopropyl) Carbodiimide (EDC).

41. (Previously Presented) A sensor according to claim 28, wherein the glucose oxidase has a concentration that is between approximately 67,000 U/ml and 150,000 U/ml.

42. (Previously Presented) A sensor according to claim 41, wherein the human serum albumin has a concentration that is between approximately 23% (w/v) and 32.5% (w/v) of the active protein.

43. (Previously Presented) A sensor according to claim 28, wherein the human serum albumin has a concentration that is between approximately 23% (w/v) and 32.5% (w/v) of the active protein.

44. (Previously Presented) A sensor according to claim 28, wherein the active protein further comprises silicone.

45. (Previously Presented) A sensor according to claim 44, wherein silicon particles are included in the active protein, and the volume of the silicone particles is less than 20% of the volume of the active protein.

46. (Withdrawn) A solidified protein material for a sensor comprising:

a protein component comprising at least one protein, the protein component being combined with a cross-linking reagent;

wherein the combined protein component and cross-linking reagent is solidified into at least one pellet for disposing in a sensor.

47. (Withdrawn) A solidified protein material according to claim 46, wherein the protein component combined with a crosslinking reagent comprises a protein mixture that had been exposed to a vapor phase cross-linking process.

48. (Withdrawn) A solidified protein material according to claim 47, wherein the protein component comprises a protein component which had been incubated prior to the protein component having been exposed to the vapor phase cross-linking process.

49. (Withdrawn) A solidified protein material according to claim 47, wherein the protein component comprises a protein component which had been immersed in a cross-linking solution after the protein component had been exposed to the vapor phase cross-linking process.

50. (Withdrawn) A solidified protein material according to claim 46, wherein the protein component comprises a protein component which has been exposed to a vapor phase that is approximately 12.5% (w/w) glutaraldehyde for approximately 16 hours.

51. (Withdrawn) A solidified protein material according to claim 47, wherein the protein component comprises a protein component which had been incubated by maintaining the protein component at approximately room temperature for approximately two hours prior to the protein component having been exposed to the vapor phase cross-linking process.

52. (Withdrawn) A solidified protein material according to claim 47, wherein the protein component comprises a protein component which had been immersed in a cross-linking solution by submerging the protein mixture in a buffered solution that is approximately 2.5% (w/w) glutaraldehyde for approximately one hour after the protein solution had been exposed to the vapor phase cross-linking process.

53. (Withdrawn) A solidified protein material according to claim 46, wherein the protein component comprises glucose oxidase and human serum albumin.

54. (Withdrawn) A solidified protein material according to claim 46, wherein the cross-linking reagent is glutaraldehyde.

55. (Withdrawn) A solidified protein material according to claim 53, wherein the cross-linking reagent is glutaraldehyde.

56. (Withdrawn) A solidified protein material according to claim 46, wherein the cross-linking reagent is selected from a group consisting of glutaraldehyde, disuccinimidyl suberate (DSS), and 1-Ethyl-3 (3-Dimethylaminopropyl) Carbodiimide (EDC).

57. (Withdrawn) A solidified protein material according to claim 53, wherein the glucose oxidase has a concentration that is between approximately 67,000 U/ml and 150,000 U/ml.

58. (Withdrawn) A solidified protein material according to claim 57, wherein the human serum albumin has a concentration that is between approximately 23% (w/v) and 32.5% (w/v) of the combined protein component and cross-linking agent.

59. (Withdrawn) A solidified protein material according to claim 46, wherein the human serum albumin has a concentration that is between approximately 23% (w/v) and 32.5% (w/v) of the combined protein component and cross-linking agent.

60. (Withdrawn) A solidified protein material according to claim 46, wherein the at least one pellet is configured as at least one elongated structure having a dimension that is elongated relative to its other dimensions.

61. (Withdrawn) A solidified protein material according to claim 46, wherein the at least one pellet comprises a plurality of pellets that had been cut into pieces from a single continuous length of protein material.

62. (Withdrawn) A solidified protein material according to claim 60, wherein each elongated structure is semi-cylindrical in cross-section.

63. (Withdrawn) A solidified protein material according to claim 46, wherein the protein component comprises a protein component in which silicone has been added.

64. (Withdrawn) A solidified protein material according to claim 46, wherein silicon particles are included in the protein component, the volume of the silicone particles is less than 20% of the volume of the protein component.

65. (Withdrawn) An active protein for disposing in a sensor, the active protein comprising a solidified pellet composed of gluscose oxidase, human serum albumin, and a cross-linking reagent.

66. (Withdrawn) An active protein as recited in claim 65, wherein the active protein is solidified into at least one pellet before disposing in the sensor.

67. (Previously Presented) A sensor as recited in claim 28, wherein the solidified form of the active protein comprises a pellet that is hard enough to maintain its shape without external forces.

68. (Withdrawn) A solidified protein material as recited in claim 46, wherein the solidified pellet is hard enough to maintain its shape without external forces.

69. (Withdrawn) An active protein as recited in claim 65, wherein the solidified pellet is hard enough to maintain its shape without external forces.

70. (Previously Presented) The sensor of claim 28,

wherein said active protein in said solidified form has a shape that is one of semicylindrical, cylindrical, tubular, and spherical.

71. (Currently Amended) A sensing device formed by a process, said process comprising:

providing a protein matrix in a hardened state, said step of providing said protein matrix in said hardened state comprising:

obtaining a protein mixture;

adding a cross-linking reagent to the protein mixture to form a combined mixture;

molding the combined mixture in a recess in a block of a mold; and

allowing the molded combined mixture to harden so as to form said protein matrix in said hardened state;

providing a sensor body having a cavity for receiving said protein matrix in said hardened state; and

placing said protein matrix in said hardened state into said cavity of said sensor body~~.~~;

wherein said protein matrix in said hardened state is sufficiently immobilized prior to being placed within the cavity of the sensor body such that the protein matrix in said hardened state minimizes swelling that would deform a shape of the sensor body and such that the protein matrix in said hardened state minimizes shrinkage that would create voids between the protein matrix in said hardened state and the sensor body once the protein matrix in said hardened state has been placed within the cavity of the sensor body.

72. (Previously Presented) The sensing device formed by the process of claim 71, wherein the step of allowing the molded combined mixture to harden so as to form said protein matrix in said hardened state, comprises:

allowing the molded combined mixture to harden; and

cutting the hardened, molded combined mixture so as to form said protein matrix in said hardened state in a desired shape and size.

73. (Previously Presented) The sensing device formed by the process of claim 71, wherein the step of allowing the molded combined mixture to harden so as to form said protein matrix in said hardened state, comprises:

incubating the molded combined mixture in the mold at a specified temperature for a specified period of time so as to form said protein matrix in said hardened state.

74. (Previously Presented) The sensing device formed by the process of claim 71, wherein said step of molding the combined mixture in a recess in a block of a mold, comprises:

pressing together a top block of a mold and a bottom block of said mold, said bottom block having a top surface facing said top block, said top surface of said bottom block having a recess for receiving said combined mixture; and

inserting said combined mixture into said recess in said top surface of said bottom block so as to mold said combined mixture.

75. (Previously Presented) The sensing device formed by the process of claim 71, wherein said step of molding the combined mixture in a recess in a block of a mold, comprises:

molding the combined mixture in a recess in a block of a mold to have a shape that is one of semicylindrical, cylindrical, tubular, and spherical.

76. (Previously Presented) The sensing device formed by the process of claim 71, wherein said step of molding the combined mixture in a recess in a block of a mold, comprises:

molding the combined mixture in a recess in a block of a mold to have a desired shape and size.

77. (Previously Presented) The sensing device formed by the process of claim 71, wherein said protein mixture comprises glucose oxidase and human serum albumin.

78. (Previously Presented) The sensing device formed by the process of claim 71, wherein said cross-linking reagent comprises glutaraldehyde.